The author also quotes several writers who have pointed out that the climate of Angora exhibits a remarkable tendency to the development of a silky coat in animals of several kinds, this tendency displaying itself among cats and greyhounds, as well as in the goats. Very interesting is his suggestion that the so-called mohair of the Angora goat really corresponds to the under-fur or "pashm" of the wild goat, the ordinary fur of the latter being represented by the "kemp" of the former. If this prove to be well founded, it would be decisive for the origin of the domestic breeds from the wild goat, in contradiction to the markhor (*Capra falconeri*), since under-fur is not developed at all in the latter species.

Although it is considered probable that the Angora originally formed a single pure breed, there is evidence of subsequent crossing with the common Kurd goat, by means of which several sub-breeds have resulted, one of them being now hornless. Crossing seems also to have taken place with a local breed descended from the well-known shawl-goat of Kashmir.

After several chapters devoted to the extent and value of the mohair trade in Turkey, the author comes to what appears to be the chief subject of his work, namely the first importation of the Angora into Cape Colony, and the subsequent development of the South African mohair trade. First of all, in 1725, the experiment was tried of introducing Kashmir goats into the Cape, but it turned out a failure; and probably this was fortunate, since, in the first place, it is a much less valuable animal than the Angora, having only a comparatively small quantity of "pashm" at the roots of its long hair, and, secondly, there is a strong probability that even this would disappear under the influence of a hot climate. Of Angoras the first importation took place in 1838; and it is practically to a single female and her one kid that the existing stock owes its origin. To improve the crosses thus produced between the Boer goats and the Angoras, fresh importations have continued from time to time from that date up to 1896; and some idea of the value attached to high-class blood may be gathered from the fact that no less a sum than 450*l*. has been paid for a single pure-bred ram, and 205*l*. for a ewe. Unfortunately, with some of the importations, pleuro-pneumonia was introduced into the Cape, and, with the usual virulence of such diseases in a new field, played terrible havoc with the flocks. Inoculation and other remedies seem, however, at last to have pretty well stamped out the plague.

In a later chapter statistics and tables are given showing the value of the Cape trade in mohair and goat-skins from the year 1857 to the present time. Of the former commodity the maximum value appears to have been reached in 1895, when the sum realised was 710,867*l*.; while in the latter 1890 was the record year, the declared value then being 142,425*l*. The two final chapters on the Angora are devoted to its importation into the United States and Australia respectively. In the States, although the number of goats in comparison with the population is relatively small, the trade seems to be in thriving condition. Not so in Australia.

"Apart from the suitability or otherwise of Australia to Angora goat farming, the failure to establish the industry there is amply accounted for by the fact that Australia is so perfectly adapted to sheep; so that the question is, after all, not so much whether the Angora will thrive and pay, but whether it will thrive and pay better than the Merino. Goats and sheep never do equally well on the same veld; that which is peculiarly adapted to the one never suiting the other nearly so well."

Did space permit, many more equally interesting extracts might be taken from Mr. Schreiner's work. To many of our readers, as to his reviewer, the extent and value of the mohair trade will doubtless come as a revelation, and since everything relating to the prosperity and wealth of the empire ought to be of interest to every patriotic Englishman, the book may lay claim to a wider circle of readers than might at first sight be attracted by its title.

From mohair to ostrich feathers—another important article of British African trade—is a wide jump, but the portion of the book devoted to this subject is of so much interest, that a few words must be given. And here the interest is not so much from the commercial as from the natural history point of view. Mr. Schreiner strongly combats the generally accepted theory of the polygamous habits of the ostrich.

"Every authority," he writes, "that I have consulted holds that the ostrich is polygamous, but the evidence against polygamy is very strong: a pair make the nest; the hen lays all her eggs (a full sitting) in that nest; the hatching of the eggs and the care of the chicks are shared equally by cock and hen; the cock loses his sexual vigour, and leaves his attention to the hen, soon after beginning to sit; and one hen to a nest yields the best results."

It is true that nests are frequently seen in which two or more hens are laying, but the author believes that such hens have been unable to obtain a mate for themselves, and have attached themselves, *nolens volens*, to one already provided with a partner. In such a nest the eggs get shifted about and never receive regular incubation, with the result that few or no chicks are hatched; this alone forming a strong argument against polygamy being the normal habit. Furthermore, it is added that travellers frequently mistake large chicks for hens, thus asserting polygamy when it is non-existent. The conclusions of one who has had such unusual opportunities of observation should, to say the least, receive the most respectful attention on the part of stay-at-home naturalists.

R. L.

ASTRONOMICAL RELIGION IN EGYPT.

Creation Records discovered in Egypt. By G. St. Clair. Pp. xii + 492. (London: Nutt, 1898.)

THE idea that the religious observances of the Egyptians were founded upon facts of astronomy deduced by them is very old, and almost every text of any length which is published affords additional proof of the substantial correctness of the idea; it could, in fact, hardly be otherwise. Since the visible emblem of the great god of the early Egyptians was the sun, and since the representatives of the lesser gods were the moon and stars, it follows that every religious ceremony which was celebrated publicly in Egypt must have had reference to the conditions and movements of the celestial bodies.

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It is quite easy to recognise certain evident proofs of this fact, such as the drawing along of a model of the boat of the sun in a procession to typify the sun's course in heaven, or the drawing of the boat of the god Seker round the sanctuary at dawn in imitation of the sun's motion, but many other equally evident proofs are not so easily explained. We know tolerably well what ceremonies were performed, but we know not the why and the wherefore. In making inquiries into such difficult matters it is important to remember that the knowledge of astronomy possessed by the Egyptians has been greatly overrated, just as their knowledge of mathematics has been, from time immemorial, over-estimated; they probably knew more of both subjects than the rest of the world in the early period of their history, but the limits of their exact knowledge were reached tolerably soon.

No better proof of this statement can be found than in the excellent essay of Sir Norman Lockyer, entitled the "Dawn of Astronomy," a work which has not received the attention which it deserves from certain Egyptologists. It is, however, unnecessary to repeat here the deductions which he has carefully drawn from carefully ascertained facts. Two of the most important results of his work are the certainty with which we may now accept the conclusions that astronomical religion in Egypt dates from a period which may be measured by thousands of years, and the discovery of the principles which guided the Egyptians in planning the sites of their temples from Memphis to the Sudân.

Passing from general considerations such as these we come to Mr. St. Clair's book on "Creation Records discovered in Egypt," wherein we have the first fruits of fifteen years' systematic study of mythology, and an attempt to construct methodically the mythology of the Egyptians. Mr. St. Clair claims, and claims rightly, that it was impossible to understand Egypt's religion and mythology until the various documents which the Egyptians themselves wrote on these subjects had been studied and translated; but the question which naturally arises is, Have enough of these documents been studied, and have they been correctly interpreted? Mr. St. Clair does not pretend that his work is final, and therein is much to be commended; but beyond doubt it shows great industry, and a catholic use of authorities and writers which is not commonly to be found in the book of a man who is attempting to promulgate a theory, however sound or however learned. He has read, apparently, everything which he thought would bear upon his subject, and has fitted a number of facts together with considerable ingenuity; more than this, he states his conclusions and deductions with modesty. Of course many of his conclusions will be combated with vigour, and many will be rejected off-hand; still the whole book is suggestive, and much of it will be accepted by students of astro-theology. The great storehouse from which Mr. St. Clair has drawn is the "Book of the Dead," and it will astonish many to see what an extraordinary collection of facts he has deduced from it; it is, however, a pity that he did not make more use of the early version of the work such as we find on the coffins of Amamu and the Mentu-heteps.

After a table of the Egyptian dynasties, and chapters on the Calendar and its relation to Egyptian Myths, we have a series of essays on the gods, the Nile, the reign of Rā, celestial cities, &c.; these are followed by another series of short chapters on the Creation, Deluge, Confusion of Tongues, and the doctrine of a future life, which many readers will think the most interesting part of the book.

Certain omissions are in places noticeable. Thus in the section on the Creation (p. 420 f.) we notice no account of the story of the Creation as told in the papyrus of Nesi-Amsu; the belief in the necessity of eating the scarabæus in order to obtain children, which exists to this day in the Sudân, ought to have been discussed. It is interesting to point out also that as Thoth was held to be a healer of diseases, so also was the ape, which represented him and was sacred to him, and that this idea of the ape's powers is extant in Egypt to the present day. Barren women have been seen to pass their bodies over Egyptian statues of apes, and to pray at the same time that the disease of barrenness from which they were suffering might be done away by these means; Mr. St. Clair might have instanced several survivals of this nature. On p. 96, for *tet* read *khat;* and to the five constituent parts of the body and soul there enumerated add *ren*, "name"; *khu*, "intelligence"; *sekhem*, "form"; and *ȧb*, "heart."

PSYCHOLOGICAL SCIENCE.

Psychologie als Erfahrungswissenschaft. By H. Cornelius. Pp. v + 445. (Leipzig: B. G. Teubner, 1897.)

Primer of Psychology. By E. B. Titchener. Pp. ix + 314. (London: Macmillan and Co., Ltd. New York: The Macmillan Company, 1898.)

Outlines of Descriptive Psychology. By G. T. Ladd. Pp. xi + 428. (London: Longmans, Green, and Co., 1898.)

Versuch einer Darstellung der Empfindungen. By W. Przibram. Pp. 28, with five plates. (Vienna: Alfred Hölder, 1898.)

THE marked difference in contents and tone of the four works before us is a striking proof of the extent and variety of the topics embraced in the modern science of psychology. By far the most original and important of the four is the work of H. Cornelius, which treats the problems of psychology, in the main, from the epistemological point of view, with unusual carefulness of statement, and still more unusual lucidity of style. The author is clearly familiar with the recent literature of the subject, English and French as well as German; but the writers whose influence is most clearly traceable in his treatment of his material are both Germans, Avenarius and Mach. The author's attitude towards the main problems of psychological science may be briefly summarised as follows: — Psychology, as the science of "psychical facts," is the only possible basis of a sound general philosophy. Its special task is, by describing those psychical facts in the simplest possible terms, to explain the growth and meaning of the more or less artificial and complicated hypotheses which we frame to ourselves in every-day life, and in scientific reflection, about the nature of the world. In

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